LISTING OF CLAIMS

6. (currently amended) A method **for identifying a protein, polypeptide or peptide secreted by an enriched population of adipocytes** comprising:

(i) isolating human preadipocytes and then differentiating them into [~~a greater than 90%~~] **an** enriched population of **at least 90%** ~~cells which exhibit characteristics of an adipocyte~~ **adipocytes,** [~~; and~~] **wherein (a) the preadipocytes are not immortalized cells, (b) the differentiation is achieved in a cell culture medium that comprises a concentration of a a cyclic AMP inducer, insulin, an insulin analog, a peroxisome proliferator-activated receptor gamma agonist, or a retinoid X receptor agonist sufficient to stimulate differentiation of the preadipocytes, (c) the preadipocytes are plated at a density of at least 25,000 cells/cm^2 ; and**

(ii) identifying a protein, polypeptide or peptide secreted by the enriched population.

7. (currently amended) The method of claim 6, wherein the [~~differentiation is achieved in a medium that comprises a factor selected from the group consisting of glucose, isobutylmethylxanthine, insulin, an insulin analogue, peroxisome proliferator-activated receptor gamma agonist, and a retinoid X receptor agonist~~] **cAMP inducer is isobutylmethylxanthine or forskolin.**

8. (currently amended) The method of claim 6, wherein the [~~factor is a peroxisome proliferator-activated receptor gamma agonist~~] **cell culture medium comprises a glucocorticoid selected from the group consisting of dexamethasone, hydrocortisone and cortisol.**

9. (currently amended) The method of claim 6, wherein the [~~factor is a retinoid X receptor agonist~~] **peroxisome proliferator-activated receptor gamma agonist is a thiazolidinedione.**

10. (previously amended) The method of claim 6, wherein prior to differentiating them, the preadipocytes are plated at a density of about 25,000 to 30,000 cells/cm^2.

11. The method of claim 6, wherein the compound identified is a protein.

12. The method of claim 6, wherein the compound identified is a peptide.

13. The method of claim 6, wherein the differentiated cells are genetically modified.

14. (currently amended) The method of claim 6, wherein the isolated human preadipocytes are differentiated into a [~~greater than~~] 95% enriched population of [~~cells which exhibit characteristics of an adipocyte~~] **adipocytes**.

15. The method of claim 6, wherein the compound identified is a polypeptide.

16. (new) The method of claim 6, wherein prior to differentiating them, the preadipocytes are plated at a density of about 25,000 to 40,000 cells/cm^2.